

Evaluating Proactive Outreach for Prior Authorization Recertifications in Medicaid Patients

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Continuity of care results from ongoing health care management facilitated by an interdisciplinary team of various health care providers (eg, physicians, nurses, pharmacists) with a shared goal of high-quality, cost-effective medical care. Through effective methods of continuity of care, interdisciplinary teams are able to optimize patient care by providing safe and effective medication therapies. The goal is to reduce fragmentation of care and improve patient safety and quality of care.^{1,2}

Pharmacists play a vital role in the team-based approach necessary to strengthen continuity of care.³ The American Society of Health-System Pharmacists recognizes continuity of care as a vital requirement in the appropriate use of medications and encourages pharmacists to ensure the continuity of pharmaceutical care as patients transition between settings (eg, hospital to community, provider to provider, outpatient visit to home).³ One way in which continuity of pharmaceutical care may be fragmented is through delays in the prior authorization (PA) process, specifically if a patient does not have an active PA or one is not submitted to extend an existing authorization.⁴

PA is a formulary management strategy used to assess medical necessity of the requested medication and to encourage the use of effective and less costly therapies.³ PA requests are submitted by prescribers (eg, physicians, nurse practitioners) for specific medications (eg, high-cost specialty medications, medications requiring extra monitoring for safety) and receive approval from the health plan prior to the medication being covered.⁴ The duration of PA approvals varies based upon the medication requested, the clinical rationale for use, and the health plan. A new PA may be submitted either for the same medication or for a therapeutically equivalent medication, either before or after the current PA expiration; however, not all PAs are submitted before the current PA expires, resulting in loss of access to medication coverage and delays in therapy.

Therapy delays and limited access to medications are systemic barriers to medication adherence. Medication nonadherence is defined as any deviation from the prescribed course of medical treatment and is vital in predicting patient outcomes.⁵ Medication

ABSTRACT

OBJECTIVES: To assess the effectiveness of a proactive provider intervention in prompting prior authorization (PA) submissions or provider response prior to PA expiration for medically complex Medicaid patients.

STUDY DESIGN: Pre-post outreach study with data from pharmacy claims and provider outreach.

METHODS: The intervention and historical comparison (control) groups included expired PAs from December 2019 to February 2020 and from December 2018 to February 2019, respectively. Provider outreach, including telephonic and fax attempts, was conducted over a 2-week period prior to PA expiration. Outcomes were classified as positive or negative based on provider conversation coupled with the result (eg, PA submission) for the intervention group and based solely on pharmacy claims for the control group. The primary end point was the percentage of positive outcomes between the groups, analyzed via χ^2 test. The time from PA expiration to the new PA submission was evaluated via t test.

RESULTS: A total of 342 outreach attempts were conducted for 270 PAs representing 193 unique patients. Outreach was more likely to result in positive outcomes in the intervention group vs no outreach in the control group (87% vs 25%; $P < .00001$). On average, PAs were submitted 3.5 days prior to expiration in the intervention group vs 13.0 days after expiration in the control group ($t = -7.50$; $P < .00001$).

CONCLUSIONS: Proactive outreach resulted in a greater percentage of PA submissions and a significantly reduced time to PA submission. These findings provide important information for payers in guiding clinical programs to enhance continuity of care among at-risk populations.

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TAKEAWAY POINTS

Implementing a proactive outreach program for prior authorization (PA) recertifications in a state Medicaid population resulted in significantly more PA submissions and a reduction in time to PA submission, increasing patient access to medications.

- ▶ Studies have examined challenges (eg, monitoring PA status) among providers and patients that affect PA delays and continuity of care; however, limited literature exists on effective proactive interventions in the PA process.
- ▶ This study provides information for payers that can guide the development of clinical outreach programs that monitor adherence and outcomes, reduce provider administrative tasks (eg, tracking PA duration), and ensure that medications are available for patients.
- ▶ Further studies could examine proactive PA interventions for additional at-risk populations and may directly compare various forms of outreach (eg, mail, telephone, fax, email), frequency (eg, weekly, twice weekly), and the intervention's impact on total medical expenses (eg, hospitalizations, emergency department visits).

therapy delays, it may be prone to human error. For this reason, proactive outreach to provider offices regarding an upcoming PA expiration may prompt the provider to evaluate the ongoing need for treatment and submit a new PA to minimize treatment delays. Limited literature exists regarding outreach programs that encourage new PA submissions prior to the expiration date of the current PA or the types of outreach that may be the most effective.

This study analyzed the impact of a 3-part, proactive outreach intervention in prompting new PA submissions and/or provider response in a state Medicaid program.

nonadherence varies by disease, patient characteristics, and insurance coverage.⁶ Poor medication adherence often leads to preventable worsening of disease, additional health risks (eg, adverse events), and increased medical costs (eg, hospitalizations, emergency department [ED] visits).⁵ Approximately 10% of hospitalizations in older adults are attributed to medication nonadherence, with costs for all-cause (ie, not disease specific) nonadherence ranging between \$5271 and \$52,341.⁶ There are multiple risk factors for poor medication adherence, including the patient's inability to access or renew prescriptions, failure to take the medicine as prescribed, and abandonment of the medication regimen altogether.⁵ Having an active PA on file helps ensure that barriers such as inability to renew prescriptions and abandonment of medication regimen are reduced. Interventions to improve medication adherence include patient education, case management (eg, outreach to patients to assess adherence), and discharge counseling.⁵ There is limited evidence on how to improve medication adherence through proactive interventions in prompting new PA submissions.

Although limited studies evaluating PA processes exist, emerging evidence supports the impact of such clinical programs on preventing delays in treatment. An HIV clinic at the University of Alabama at Birmingham found a mean (SD) medication access delay of 3.1 (5.8) days when a PA was required.⁷ Delays in access are concerning because patients with HIV require consistent antiretroviral therapy to maintain viral suppression and prevent disease complications.⁷ Challenges included lack of PA status awareness (eg, approved or denied status) among prescribers, pharmacists, and patients.⁴ The American Medical Association predicts a 20% increase per year in the number of medications that will require a PA.⁴ With an expected increase in PA volume and the current challenges with the PA process, it is imperative to intervene to minimize disruptions in treatment and improve quality of care for patients.

Public and commercial payers advise prescribers to track patients' PAs and actively assess the need for PA recertification to ensure continuity of care and prevent delays in therapy.^{1,4} Although asking providers to track PAs is considered best practice in minimizing

METHODS

Population

PAs for Massachusetts Medicaid (MassHealth) patients in the fee-for-service (FFS), primary care clinician (PCC), and primary care accountable care organization (ACO-B) plans who were enrolled in the Community Case Management (CCM) program were analyzed. CCM is a care coordination program for medically complex patients who require more than 2 hours per week of continuous skilled nursing.^{8,9} CCM supports both pediatric and adult MassHealth patients and coordinates various services including physical therapy, procurement of medical equipment, and home/personal support.^{8,9} The CCM population is continuously updated based upon MassHealth plan coverage and the medical need for continuous skilled nursing hours. The CCM population was chosen because these patients are medically complex and frequently utilize PAs.

Study Design

CCM patient data were extracted for the intervention and historical comparison groups. Each data set was used to query PAs by expiration date, and each PA considered for inclusion was evaluated to ensure continuous MassHealth coverage during the study time frame for each patient. PAs included for the intervention group were those set to expire between December 12, 2019, and February 29, 2020, for CCM-enrolled patients as of October 31, 2019. PAs were excluded if a new PA or paid pharmacy claim was submitted prior to day 1 outreach. PAs included for the historical comparison group were those that expired between December 12, 2018, and February 28, 2019, for CCM-enrolled patients as of October 31, 2018.

PAs for medications included in protected health classes (eg, substance use disorder, HIV) and PAs not deemed clinically appropriate for a new PA submission based on the indication for use (eg, short-term antibiotic course) were excluded from both groups in the study.

MassHealth patients enrolled in CCM as of October 31, 2019, with an expiring PA were identified for the intervention group. The PAs for outreach were organized into sets. Each set included PAs expiring in the upcoming 2 weeks coupled with PAs for the same patient and

provider expiring in the upcoming 4 weeks to minimize provider outreaches. Outreach to the provider was conducted on days 1, 4, and 7 (maximum of 3 attempts) across a 14-day time period for each set, for a total of 6 sets. Outreach attempts on days 1 and 4 were conducted telephonically, with day 4 outreach being conducted only if day 1 outreach resulted in no provider contact and no new PA and/or provider response received prior to day 4. Day 7 outreach was conducted via fax if a new PA and/or provider response was not submitted prior to outreach. The historical comparison group represented the standard scope of practice with no proactive provider outreach and PAs potentially expiring without a new PA submission prior to the expiration.

PAs in the intervention group were evaluated based on successful, modified, or unsuccessful outreach (Table 1). These were then categorized as either a positive or negative outcome based upon provider discussion and response (Table 2). For example, a successful outreach (eg, direct contact with provider) resulting in a new PA submission was categorized as a positive outcome. PAs in the historical comparison group were categorized into positive and negative outcomes based solely on pharmacy claims data of whether a new PA was submitted within 30 days of PA expiration. For newly submitted PAs, the time from the expired PA date to the submission of the new PA was analyzed for both intervention and historical comparison groups.

This study received institutional review board approval from UMass Chan Medical School.

Data Extraction and Evaluation

This pre-post evaluation utilized pharmacy claims and PA data for members in MassHealth FFS/PCC/ACO-B plans who were enrolled in the CCM program. Data were obtained from the pharmacy claims processing system and an internally managed PA system containing standardized, disease-specific information collected from the PA request forms including diagnosis. Patient profiles were evaluated for 30 days after day 1 outreach for the following: a new PA submission for the same medication (ie, the expiring PA) or a new PA submission for a therapeutically equivalent medication.

Health plan patients with expired PAs were included in the historical comparison group. Patient profiles were evaluated for 30 days after the PA expiration date for the following: a new PA submission for the same medication (ie, the expired PA) or a new PA submission for a therapeutically equivalent medication.

Paid pharmacy claims for patients in the intervention and historical comparison groups were evaluated for therapeutically equivalent medications that did not require a PA or for third-party liability claims (ie, primary insurance). Provider outreach notes were assessed for provider rationale regarding justification for no new PA submission for the intervention group.

Statistical Analysis

Chi-square tests were used to compare the percentage of PAs with positive and negative outcomes. T tests were used to compare the

TABLE 1. Intervention Definitions

Term	Definition
Successful outreach	One of the 3 outreaches resulted in direct contact with provider or staff from the provider's office
Modified outreach	Unable to speak with provider or staff from the provider's office, but fax was successfully transmitted
Unsuccessful outreach	Unable to speak with provider or staff from the provider's office, and fax was unsuccessfully transmitted
New PA submission	PA submitted for same medication or a therapeutically equivalent alternative of the expiring PA
Provider response	Clinical rationale provided for no new PA submission or a paid pharmacy claim for a therapeutically equivalent medication of the expiring PA was identified

PA, prior authorization.

TABLE 2. Outcome Categories by Group

Group	Outcome	Description	N of total PAs (%)
Intervention group	Positive outcome	Successful outreach with new PA submission*	103 (75)
		Modified outreach with new PA submission*	6 (4)
		Successful outreach and provider response	10 (7)
	Negative outcome	Successful outreach but no new PA submission or provider response	12 (9)
		Successful outreach but member is no longer active at practice site	5 (4)
		Unsuccessful outreach	1 (<1)
Historical comparison group	Positive outcome	New PA submission within 30 days of expired PA	33 (25)
	Negative outcome	No PA submission within 30 days of expired PA	100 (75)

PA, prior authorization.

*Within 30 days of day 1 outreach.

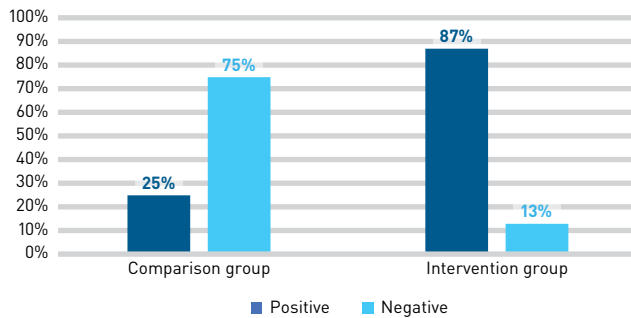
mean number of days prior to expiration that a new PA was submitted. Data were analyzed using Microsoft Excel and online calculators.¹⁰⁻¹²

RESULTS

A total of 270 PAs were analyzed for 193 unique patients, resulting in 137 PAs for the intervention group and 133 PAs for the historical comparison group. Twenty-three classes of medications were analyzed for the intervention group and 20 for the historical control group, with anticonvulsants and gastrointestinal agents being the most common in both. PAs analyzed were for patients aged 1 to 30 years (median, 13 years) and 3 to 47 years (median, 13 years) for the intervention and historical comparison groups, respectively.

Within the intervention group, 119 PAs (87%) had a positive outcome and 18 PAs (13%) had a negative outcome (Figure). In the historical comparison group, 33 PAs (25%) had a positive outcome and 100 PAs (75%) had a negative outcome (Figure). The intervention group was

FIGURE. Percentage With Positive and Negative Outcomes in the Comparison and Intervention Groups^a



PA, prior authorization.

^aA total of 270 PAs were analyzed, 133 in the historical comparison group and 137 in the intervention group. Chi-square test was performed to compare the percentage of PAs with positive and negative outcomes between the intervention and historical comparison groups. The intervention group was 3.5 times more likely to have positive outcomes vs the historical comparison group ($\chi^2 = 106$; $P < .00001$). Overall, the relative risk was 3.5 [95% CI, 2.6-4.7].

TABLE 3. Statistical Analysis of Outcomes in Comparison and Intervention Groups

Test	95% CI	Degrees of freedom	P
RR=3.5	2.6-4.7	N/A	N/A
$\chi^2 = 106$	N/A	N/A	$P < .00001$
t value=-7.50	N/A	130	$P < .00001$

N/A, not applicable; RR, relative risk.

3.5 times more likely to have a positive outcome vs the historical comparison group ($\chi^2 = 106$; $P < .00001$).¹⁰ Overall, the relative risk of having a positive outcome was 3.5 (95% CI, 2.6-4.7) (Table 3).

Outreach was conducted on 3 separate days, and the impact of each outreach day was evaluated based on the percentage of PAs submitted. The total outreach attempts for days 1, 4, and 7 were 137, 104, and 101, respectively. The percentages of PAs submitted following outreach on days 1, 4, and 7 were 12% (n = 16), 28% (n = 29), and 48% (n = 48), respectively. Of the 119 PAs with a positive outcome in the intervention group, 93 (78%) were associated with a new PA submission and 26 (22%) had provider rationale for a lack of a new PA submission. Among the 93 new PA submissions, 16 PAs (17%) were submitted after 1 attempt, 29 PAs (31%) were submitted after 2 attempts, and 48 PAs (52%) were submitted after 3 attempts.

PAs within the intervention group were further analyzed based on types of outreach and outcomes. The majority of PAs (75%) resulted in successful outreach and a new PA submission, whereas 9% of the PAs resulted in successful outreach and no new PA submission. Seven percent of PAs had successful outreach and a provider rationale for no new PA submission, whereas 4% of PAs had successful outreach, but the patient was no longer active at the practice site. Additionally, 4% of PAs had modified outreach and a new PA submission and 1% of PAs had unsuccessful outreach (Table 2). Among these new PA submissions, 98% were subsequently

approved. On average, PAs were submitted a mean (SD) of 3.5 days (10.7 days) prior to the expiration date in the intervention group vs 13.0 days (12.0 days) after the expiration date in the historical comparison group ($t = -7.50$; $P < .00001$).

DISCUSSION

This pre-post evaluation indicated that the proactive intervention resulted in a 3.5-fold increase in new PA submissions and/or provider response (ie, positive outcome) compared with a historical comparison group. Among the intervention group, the majority (78%) of outreach attempts resulted in a new PA submission, of which 98% of PAs were subsequently approved.

The majority of new PAs submitted in the intervention group were after outreach days 4 and 7, illustrating that multiple forms of outreach (eg, phone call, fax) and multiple attempts may be necessary in prompting new PA submissions and/or provider response. Although telephonic outreach may be more labor intensive compared with other types of outreach (eg, fax, mail), it can facilitate dialogue between the provider and the health plan. Through these conversations, we were able to understand the provider’s perspective in discontinuing the medication, document any rationale for delaying the PA submission (eg, awaiting laboratory assessments), and determine whether patients were no longer under the care of the provider. In our initial telephonic outreach, we confirmed the provider’s current fax number. If fax outreach was required, we sent the appropriate patient health information (PHI) to the provider. Because fax numbers are updated in our system only when a new PA is received, conducting the telephonic outreach prior to the fax outreach was important to prevent PHI breaches and follow Health Insurance Portability and Accountability Act best practices. Incorporating multiple attempts and forms of outreach can convey the urgency of the message for an upcoming potential disruption in therapy if a new PA is not submitted.

Although payers advise providers to track and actively assess their patients’ PAs, many offices are unable to do so effectively, resulting in treatment disruptions for patients. By implementing a proactive program, health plans can reduce the administrative burden of providers tracking PAs and allow them to engage in direct patient care. Not only did the intervention prompt new PA submissions, it may have also prompted providers to reassess the necessity of the medication. When conducting outreach, we received feedback that the outreach prompted the provider to assess the patient’s continued need for the medication.

Some MassHealth patients are enrolled in the CCM program based on their need for continuous skilled nursing hours. These patients are “at risk” because they are medically complex and frequently utilize PAs; however, this intervention program is not limited to serving only this population. This program can be implemented for other at-risk populations and stratified by age (eg, pediatric patients), patients utilizing high-cost specialty medications (eg, hepatitis C medications), or patients exceeding a specific PA threshold (eg, patients with more than 5 active PAs). Expanding this program to

additional populations could aid both providers and health plans in minimizing treatment delays.

Poor medication adherence contributes to a variety of undesirable effects for the patient, including worsening of disease, and can increase medical costs for both patients and the health care system. A lack of an active PA on file to fill a medication is one risk factor contributing to medication nonadherence. The proactive intervention was associated with new PA submissions before the PA expiration date, whereas in the historical comparison group, new PA submissions were submitted after the PA expiration date. This highlights the impact of the intervention in both increasing overall PA submissions and influencing the timeliness of PA submission, thus serving as an additional opportunity to minimize potential medication access delays.

Further studies could examine proactive PA interventions for additional at-risk populations. Additionally, studies may also directly compare various forms of outreach (eg, mail, telephone, fax, email), frequency of outreach (eg, weekly, twice weekly), and the total number of attempts to determine the most effective approaches. Lastly, further studies can evaluate the intervention's impact on total medical expenses (eg, hospitalizations, ED visits).

Limitations

Due to potential eligibility changes for CCM patients across years, one limitation is that the PAs included in the intervention and historical comparison groups were not for the same patients. For example, a patient who required a PA in the historical comparison group may not have met the inclusion criteria for the intervention group based on their eligibility for CCM and the methodology. This accounted for the differences in number of PAs analyzed among both groups. Additionally, providers were inconsistent between the intervention and historical comparison groups, which potentially could result in differences in provider practices and responses to outreach.

Because the historical comparison group utilized retrospective data, the reason for no new PA submissions (eg, clinical rationale for discontinuing medication, patient lacking active relationship with provider) could not be determined. With this information, there may have been an increase in positive outcomes among the PAs in the historical comparison group.

Within the intervention group, multiple sets of outreaches had state and federal holidays (eg, Christmas, New Year's Day) on which provider's offices were closed, thus increasing outreach attempts and potentially delaying PA submissions. Additionally, prior to outreach, the status of patient-provider relationship for the PAs could not be determined, thus resulting in additional outreach attempts and negative outcomes. Furthermore, outreach was not conducted for 6 PAs due to unverifiable phone and fax numbers for the provider.

CONCLUSIONS

This proactive intervention to providers regarding expiring PAs in medically complex patients in a state Medicaid population supports the use of an outreach program to increase new PA submissions

and preserve continuity of care. Proactive outreach resulted in significantly more PA submissions and a reduction in time to PA submission, both of which aid in decreasing the time during which patients do not have access to medications. Our findings provide important information for payers to guide the development of outreach programs to enhance continuity of care among a target population. Considerations identified include types of effective interventions (eg, telephonic, fax), frequency of interventions (eg, weekly, biweekly), total number of interventions, and potential patient populations in which to conduct the intervention. Implementing an outreach program could benefit providers in reducing administrative burden, health plans in monitoring medications, and patients in ensuring access to necessary medications. ■

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